

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optical device for emitting a laser light beam, comprising:

a source of a laser light beam emission source including a protective and/or insulating package and means for generating the laser light beam housed within the package, the package being provided with a laser light beam emission window; wherein the package comprises a diaphragm which defines an aperture for selecting selects a central portion of the generated laser light beam so that only the selected central portion of the generated laser light beam is propagated out of the package and has a predetermined diffraction pattern, while a propagation of the remaining portion of the generated laser light beam is obstructed; wherein only the selected central portion of the generated laser light beam passes through said emission window the package comprises the diaphragm.

2. (Previously Presented) The device according to claim 1, wherein the source comprises a semiconductor laser diode.

3. (Previously Presented) The device according to claim 1, wherein said diaphragm is directly associated to said package at said laser light beam emission window.

4. (Previously Presented) The device according to claim 3, wherein said diaphragm is directly housed in the laser light beam emission window.

5. (Previously Presented) The device according to claim 1, wherein said laser light beam emission window is shaped to serve as the diaphragm.

6. (Previously Presented) The device according to claim 1, wherein a size of the laser light beam emission window is smaller than a size of the laser light beam in a transversal cross section taken at said laser light beam emission window.

7. (Currently Amended) The device according to claim 61, wherein ~~the laser light beam emission window defines an~~ said aperture ~~having has~~ a Fresnel number smaller than 2 along a predetermined reading direction.

8. (Previously Presented) The device according to claim 7, wherein said aperture has a Fresnel number smaller than 1.2 along said reading direction.

9. (Currently Amended) The device according to claim 71, wherein said aperture has a Fresnel number smaller than 2 along an orthogonal direction with respect to ~~said-a~~ predetermined reading direction.

10. (Previously Presented) The device according to claim 1, further comprising a focusing lens.

11. (Previously Presented) The device according to claim 10, wherein the focusing lens is directly associated to said package at said laser light beam emission window.

12. (Previously Presented) The device according to claim 11, further comprising an adhesive interposed between the focusing lens and the laser light beam emission window.

13. (Previously Presented) The device according to claim 11, wherein the focusing lens is housed in the laser light beam emission window and serves as the diaphragm.

14. (Previously Presented) The device according to claim 13, wherein the focusing lens is one of a Fresnel and a diffractive lens.

15. (Previously Presented) The device according to claim 1, wherein said package exhibits a longitudinal axis Z and wherein the source is arranged in said package so that the emitted light beam propagates along a substantially perpendicular direction with respect to said longitudinal axis Z.

16. (Currently Amended) An optical reader, comprising:
a laser light beam emission device for illuminating an optical code,
means for generating at least one scan of said optical code,
photo-detecting means which collects a luminous signal diffused by the illuminated optical code and generates an electrical signal proportional thereto, and
processing means for processing the electrical signal,
wherein the laser light beam emission device comprises:
a source of a laser light beam emission source including a protective and/or insulating package and means for generating the a laser light beam housed within the package, the package being provided with a laser light beam emission window;
wherein the package comprises a diaphragm which selects defines an aperture for selecting a central portion of the generated laser light beam so that only the selected central portion of the generated laser light beam is propagated out of the package and has a predetermined diffraction pattern, while propagation of the a remaining portion of the generated laser light beam is obstructed;
wherein only the selected central portion of the generated laser light beam passes through said emission window the package comprises the diaphragm.

17. (Currently Amended) A protective and/or insulating package for a light beam emission source, the package comprising:

means for generating a light beam housed in a cavity of the package, a wall provided with a window which allows emission of the light beam, and a diaphragm which defines an aperature intended to select a central portion of the generated light beam so that only the selected central portion of the generated laser light beam is propagated out of the package and has a predetermined diffraction pattern, while propagation of the remaining portion of the generated laser light beam is obstructed, wherein only the selected central portion of the generated laser light beam passes through said emission window.

18. (Currently Amended) An optical device for emitting/detecting a luminous signal, comprising:

a source of a light beam emission source including a protective and/or insulating package and means for generating the light beam housed in a first portion of the package, a light beam emission window being formed in the first portion of the package;

photo-receiving means which detects for detecting a luminous signal diffused by an optical code illuminated by the emission source, the photo-receiving means being housed in a second portion of the package, the second portion of the package being optically separate with respect to the first portion, the second portion of the package being provided with a window for collecting the luminous signal diffused by the illuminated optical code, said emission and collecting windows being formed on respective first and second walls of the package which lie on different planes.

19. (Previously Presented) The device according to claim 18, wherein the emission source comprises a semiconductor laser diode.

20. (Currently Amended) The device according to claim 18, wherein said emission window and the collecting window are formed on respective first and second walls of said package, the first and second walls being are orthogonally oriented with respect to

one another.

21. (Currently Amended) The device according to claim 18, wherein said protective and/or insulating package further comprising comprises at least one diaphragm intended to select a central portion of the generated light beam.

22. (Previously Presented) The device according to claim 21, wherein said diaphragm is directly associated to said package at said light beam emission window.

23. (Previously Presented) The device according to claim 22, wherein said diaphragm is directly housed in the light beam emission window.

24. (Previously Presented) The device according to claim 22, wherein said light beam emission window is shaped to serve as said diaphragm.

25. (Previously Presented) The device according to claim 18, wherein a size of the light beam emission window is smaller than a size of the light beam in a transversal cross section taken at said light beam emission window.

26. (Currently Amended) The device according to claim 2521, wherein the emission window said diaphragm defines an aperture having a Fresnel number smaller than 2 along a predetermined reading direction.

27. (Previously Presented) The device according to claim 26, wherein said aperture has a Fresnel number smaller than 1.2 along said reading direction.

28. (Currently Amended) The device according to claim 2621, wherein said diaphragm defines an aperture has having a Fresnel number smaller than 2 along an

| orthogonal direction with respect to said a predetermined reading direction.

29. (Previously Presented) The device according to claim 18, also comprising a focusing lens.

30. (Previously Presented) The device according to claim 29, wherein the focusing lens is directly associated to said package at said light beam emission window.

31. (Previously Presented) The device according to claim 30, further comprising an adhesive interposed between the focusing lens and the light beam emission window.

32. (Previously Presented) The device according to claim 30, wherein the focusing lens is housed in the light beam emission window and serves as the said diaphragm.

33. (Previously Presented) The device according to claim 32, wherein the focusing lens is one of a Fresnel and a diffractive lens.

34. (Previously Presented) The device according to claim 18, further comprising a wall made of an optically opaque material interposed between said first portion of the package and the second portion of the package.

35. (Currently Amended) An optical reader comprising:
a light beam emission device which generates a light beam for illuminating an optical code,
means for generating a scan of the optical code,
a device for detecting the luminous signal diffused by the illuminated optical code and for generating an electrical signal proportional thereto,

means for processing the electrical signal,

wherein the emission device and the detection device are integrated in a single device, the single device comprising a source of light beam including a protective and/or insulating package and means for generating the laser light beam housed within the package, the package being provided with a laser light beam emission window;

wherein the package comprises a diaphragm which defines an aperture for selecting a central portion of the generated laser light beam so that only the selected central portion of the generated laser light beam is propagated out of the package and has a predetermined diffraction pattern, while propagation of the remaining portion of the generated laser light beam is obstructed;

wherein only the selected central portion of the generated laser light beam passes through said emission window the package comprises the diaphragm.

36. (Currently Amended) A protective and/or insulating package for a light beam emission source, comprising:

a first portion which houses means for generating a light beam, the first portion being provided with a first wall wherein there is formed a window which allows emission of the light beam,

a second portion which houses photo-receiving means for detecting a luminous signal diffused by an optical code illuminated by the light beam generating means, the second portion being provided with a second wall, a window for collecting the luminous signal diffused by the illuminated optical code being formed in the second wall, the second portion being optically separate from the first portion, said first and second walls lying on respective different planes.

37. (Currently Amended) An optical reader comprising:

a light beam emission device which generates a light beam for illuminating an optical code,

means for generating a scan of the optical code,

a device for detecting the luminous signal diffused by the illuminated optical code and for generating an electrical signal proportional thereto,

means for processing the electrical signal,

wherein the emission device and the detection device are integrated in a single device, the single device comprising a source of athe light beam including a protective and/or insulating package, means for generating the light beam housed in a first portion of the package, a light beam emission window being formed in the first portion of the package, and photo-receiving means which detects a luminous signal diffused by an optical code illuminated by the source, the photo-receiving means being housed in a second portion of the package, the second portion of the package being optically separate with respect to the first portion, the second portion of the package being provided with a window for collecting the luminous signal diffused by the illuminated optical code, said emission and collecting windows being formed on respective first and second walls of the package which lie on different planes.